

QUILCENE

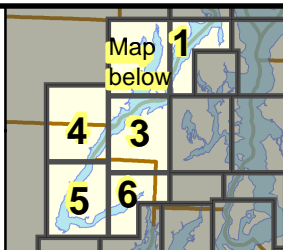
Proposed Booming Strategies

February, 2003

Hood Canal GRP





MAP # 2

0 0.5 1 2 Miles



Area not included in GRPs

Legend

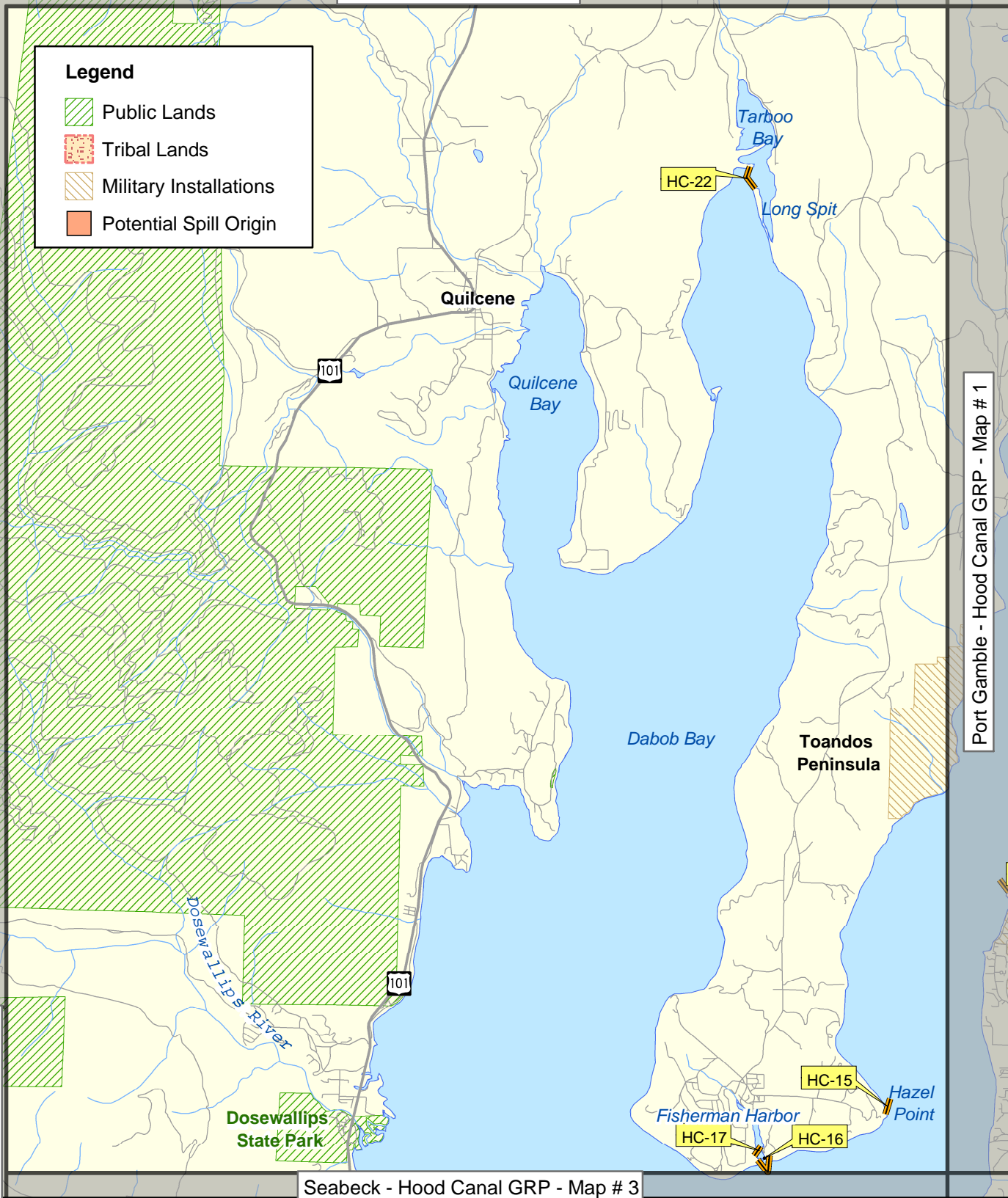
-  Public Lands
-  Tribal Lands
-  Military Installations
-  Potential Spill Origin

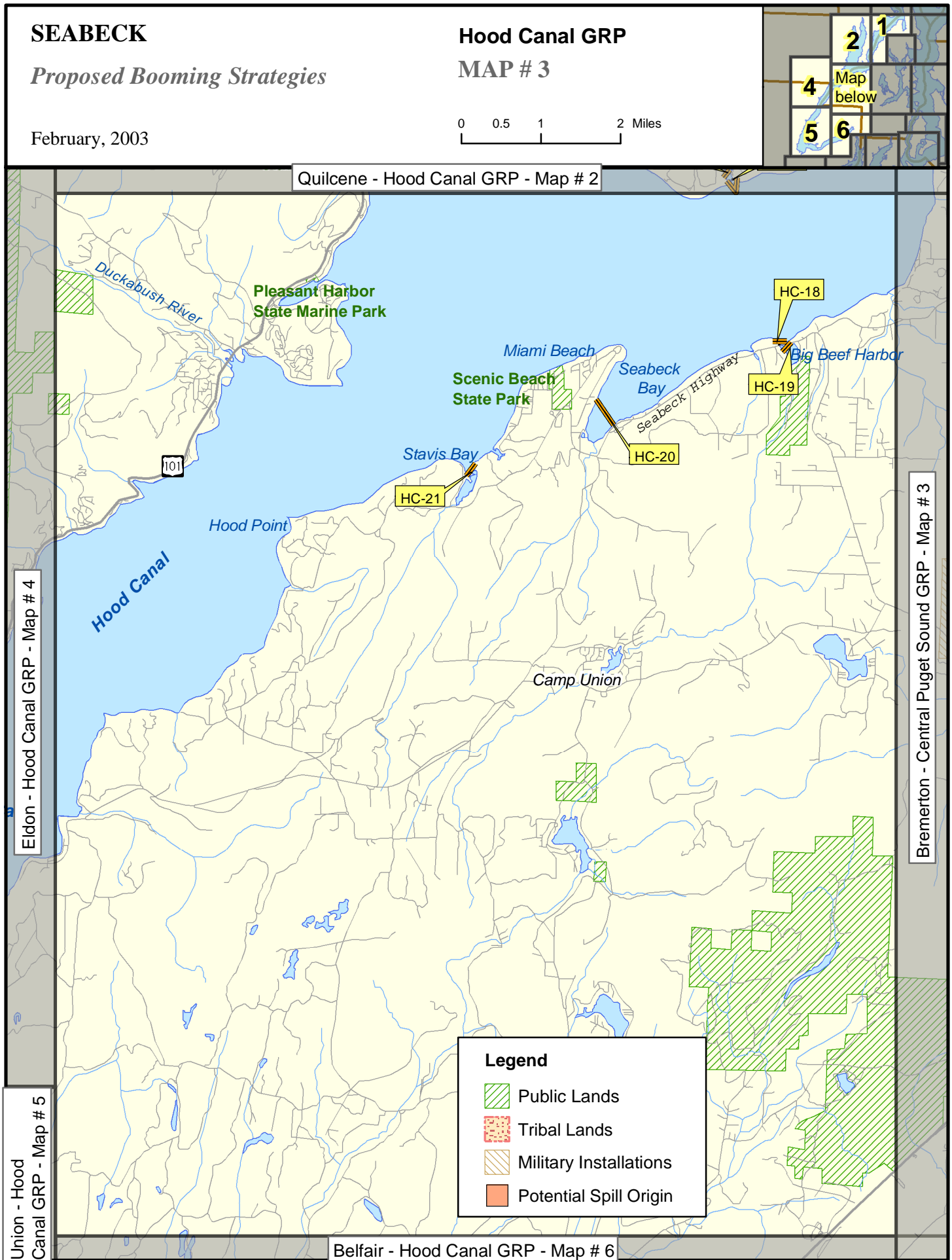
Area not included in GRPs

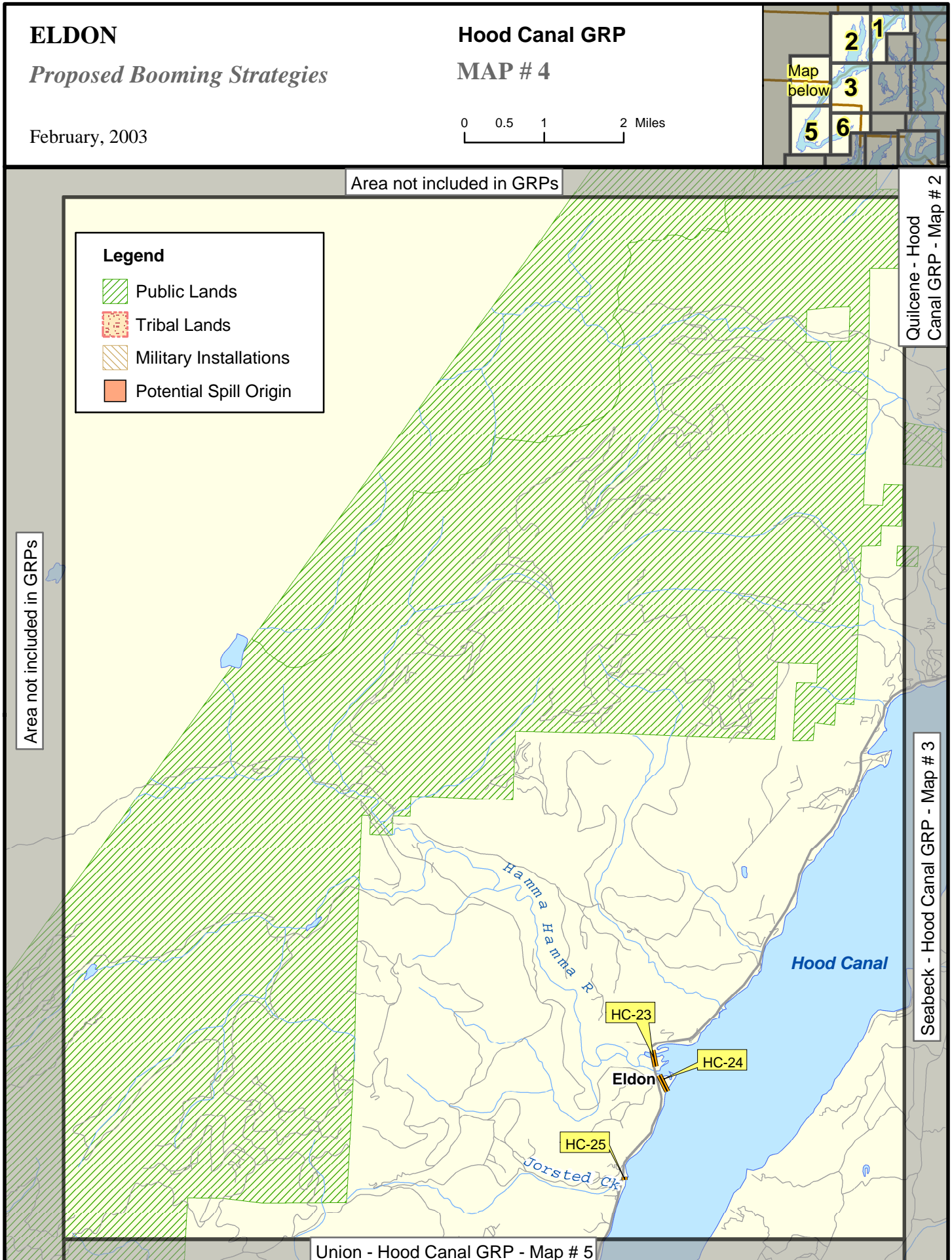
Eldon - Hood Canal GRP - Map # 4

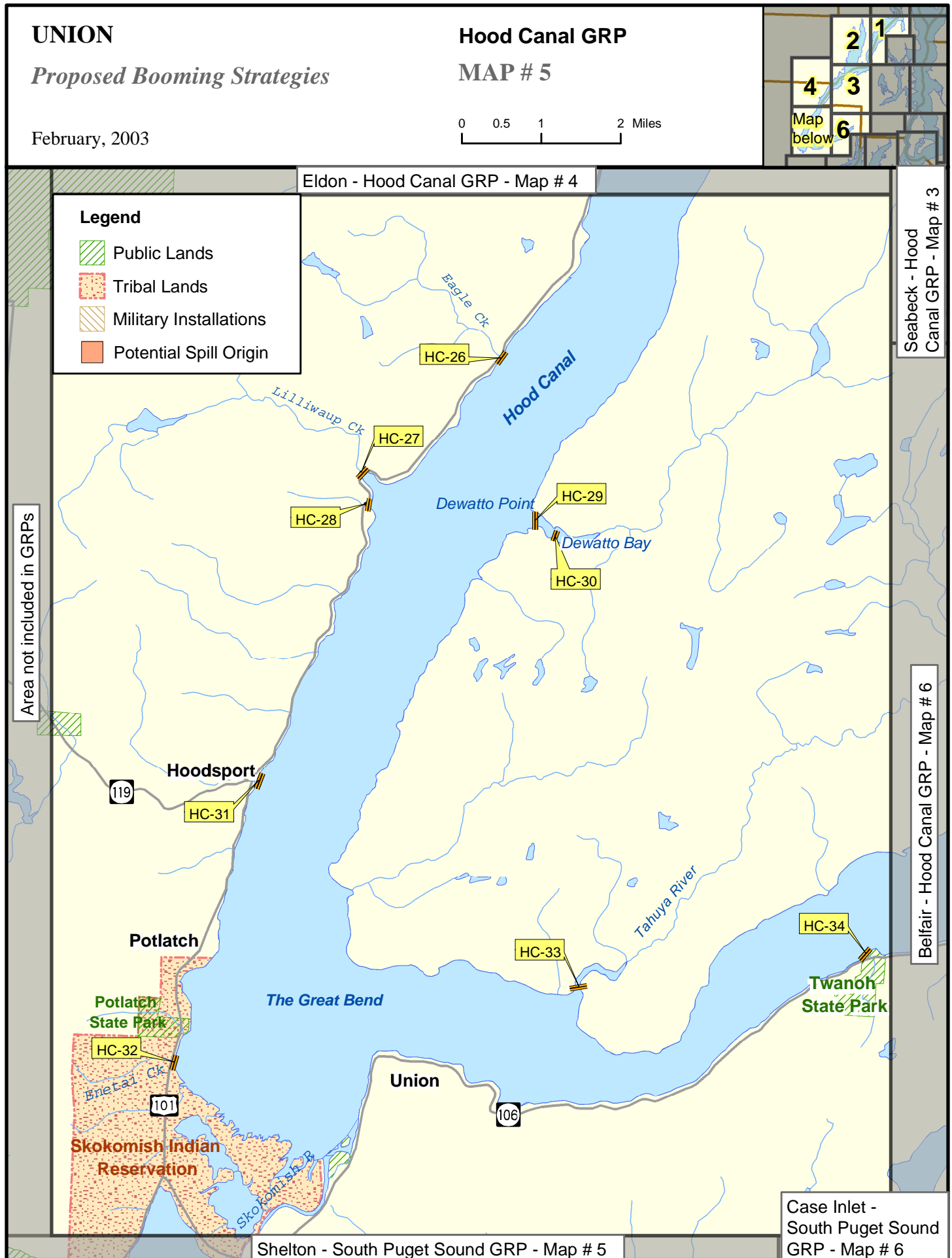
Port Gamble - Hood Canal GRP - Map # 1

Seabeck - Hood Canal GRP - Map # 3









BELFAIR

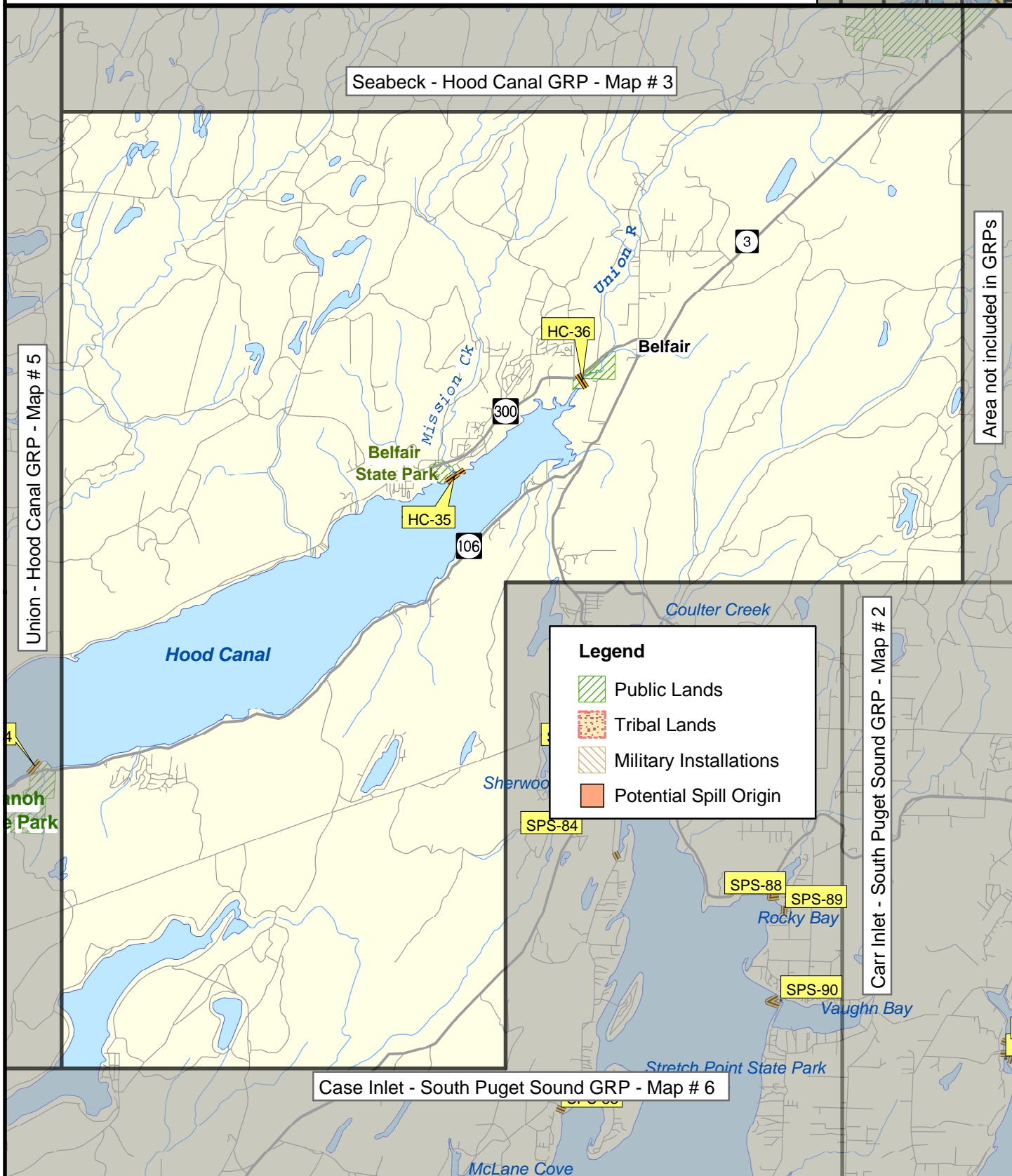
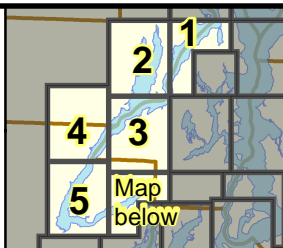
Proposed Booming Strategies

February, 2003

Hood Canal GRP

MAP # 6

0 0.5 1 2 Miles



4.3.2.2 Proposed Booming and Collection Strategies: Matrices - HOOD CANAL								
Strategy	Status	Location	Response Strategy	Length of Boom	Strategy Implementation	Staging Area	Site Access	Resources Protected
HC-1		Port Gamble KIT0430 47°-51.360' N 122°-34.670' W	Deflection/ Collection - Keep oil out of Port Gamble.	1800'	Angle boom from Rip-Rap breakwater just North of Mill to pier at Pt. Julia. Collect oil with vac trucks at pier.	Stage from Port Gamble.	Boat, road access from Port Gamble mill and Port Gamble Indian Reservation (need permission).	Sensitive nesting species, seabird concentrations, baitfish spawning beaches, and marine mammal haulout.
HC-2		Port Gamble, south end KIT0421 47°-48.880' N 122°-34.675' W	Exclusion - Keep oil out of mud flats at south end of Port Gamble.	200'	Deploy boom across narrowest opening at east end of spit.	Stage from Port Gamble.	By boat from Port Gamble Indian Reservation (need permission).	Waterfowl and shorebird concentrations, mudflat habitat.
HC-3		Hood Canal Bridge KIT0436 and JEF0311 47°-51.585' N 122°-37.455' W	Enhanced Skimming - Keep oil out of Hood Canal.	2200'	Place boom at openings in Hood Canal bridge to funnel oil to skimmers w/ boom legs in "V" configuration (high priority strategy).	Stage from Salsbury Point County Park.	By boat, ramps on each side of bridge, some access from bridge.	Sensitive Hood Canal resources.
HC-4		Kitsap Memorial Park - North of Lofall KIT0446 47°-48.925' N 122°-39.359' W	Diversion/ Collection - Keep oil out of Hood Canal.	1000'	Angle boom from pier at old ferry dock to divert oil for collection. Will be necessary only when a west wind pushes the oil to this shore.	Stage from the South Point Ferry Dock old ferry building parking lot, Lofall Pier.	By boat, ramps on each side of the Hood Canal bridge, Kitsap Memorial Park.	Protect fish and wildlife resources.
HC-5		South end of Squamish Harbor N of South Pt. JEF0292 47°-51.034' N 122°-41.071' W	Exclusion - Keep oil from entering tidal marsh.	1200'	Deploy boom across north entrance to tidal marsh/ mud flats.	Stage from Port Gamble.	By boat from Termination Pt., Squamish Harbor, or Shine Tidelands.	Marsh habitat and associated fish & wildlife.

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Strategy	Status	Location	Response Strategy	Length of Boom	Strategy Implementation	Staging Area	Site Access	Resources Protected
HC-6		South end of Squamish Harbor N of South Pt. JEF0286 47°-50.523' N 122°-40.989' W	Exclusion - Keep oil from entering tidal marsh.	300'	Deploy boom across entrance to private marina to prevent oil from entering marsh behind breakwater.	Stage from Port Gamble.	By boat from Termination Pt., Squamish Harbor, or Shine Tidelands.	Marsh habitat and associated fish & wildlife.
HC-7		South end of Squamish Harbor N of South Pt. JEF0286 47°-50.581' N 122°-41.029' W	Exclusion - Keep oil from entering tidal marsh.	500'	Deploy boom from breakwater to the sand spit to the north.	Stage from Port Gamble.	By boat from Termination Pt., Squamish Harbor, or Shine Tidelands.	Marsh habitat and associated fish & wildlife.
HC-8		South Point JEF0283 47°-49.945' N 122°-41.242' W	Diversion/ Collection - Keep oil out of Hood Canal.	1000'	Angle boom to divert oil into collection area near old ferry dock. Need boat to tend end of boom. Will be necessary only if an east wind pushes the oil to this shore.	Stage from the South Point Ferry Dock old ferry building parking lot, Lofall Pier.	Shine Tidelands and other access point south of Lofall owned by the Navy - contact COMNAVBASE Seattle.	Protect fish and wildlife resources.
HC-9		Thorndike Bay JEF0267 47°-48.585' N 122°-44.653' W	Exclusion - Prevent oil from entering inner mouth of bay.	200'	Boom across gap in spit, anchor to shore. Water breaches spit at extreme high tide.	Stage from Lofall or Bangor.	By boat from Bangor or Lofall; vehicle access to spit from S Point - Thorndyke Road.	Sensitive nesting species, waterfowl concentrations.
HC-10		Bangor KIT0463 47°-45.302' N 122°-43.304' W	Diversion/ Collection - Collect oil at pier.	500'	Place collection boom at Explosive Handling wharf.	On site; gyms/mess facilities on base (5-7 miles from water).	Roads available from Bangor - contact COMNAVBASE Seattle.	Protect fish and wildlife resources.

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HC-11		Bangor KIT0464 47°-44.867' N 122°-43.679' W	Diversion/ Collection - Collect oil at pier.	500'	Place collection boom at Service Pier.	On site; gyms/mess facilities on base (5-7 miles from water).	Roads available from Bangor - contact COMNAVBASE Seattle.	Protect fish and wildlife resources.
HC-12		Bangor KIT0465 47°-44.625' N 122°-44.020' W	Diversion/ Collection - Collect oil at pier.	500'	Place collection boom at Delta Pier.	On site; gyms/mess facilities on base (5-7 miles from water).	Roads available from Bangor - contact COMNAVBASE Seattle.	Protect fish and wildlife resources.
HC-13		Bangor KIT0467 47°-44.176' N 122°-44.418' W	Diversion/ Collection - Collect oil at pier.	500'	Place collection boom at Marginal Pier.	On site; gyms/mess facilities on base (5-7 miles from water).	Roads available from Bangor - contact COMNAVBASE Seattle.	Protect fish and wildlife resources.
HC-14		Bangor KIT0468 47°-43.770' N 122°-44.635' W	Diversion/ Collection - Collect oil at pier.	500'	Place collection boom at KB docks.	On site; gyms/mess facilities on base (5-7 miles from water).	Roads available from Bangor - contact COMNAVBASE Seattle.	Protect fish and wildlife resources.
HC-15		Hazel Point JEF0234 47°-41.594' N 122°-46.271' W	Diversion/ Collection - Keep oil out of Hood Canal.	1000'	Angle boom from shore to divert oil to collection area near houses. Need to tend end of boom w/ boat. Use land anchor or chain bridle on Rip Rap.	Stage from Lofall or Bangor.	By boat from Bangor or Seabeck; road access from Dabob - Coyle Rd (dirt road access - difficult for vac. trucks) may need to bring in portable skimmers.	Sensitive nesting species; other Hood Canal resources.

4.3.2.2 Proposed Booming and Collection Strategies: Matrices - HOOD CANAL								
Strategy	Status	Location	Response Strategy	Length of Boom	Strategy Implementation	Staging Area	Site Access	Resources Protected
HC-16		Fisherman Harbor JEF0229 47°-41.142' N 122°-48.007' W	Exclusion - Keep oil out of harbor.	600'	Place chevron in front of harbor entrance. Low potential for oil to enter harbor.	Stage from Seabeck at Pleasant Harbor.	By boat from Seabeck or Bangor.	Shellfish, crabs & salmonids.
HC-17		Fisherman Harbor, backup JEF0229 47°-41.218' N 122°-48.091' W	Exclusion - Keep oil out of harbor.	600'	If strategy at harbor entrance cannot be deployed, move back behind sand spit.	Stage from Seabeck at Pleasant Harbor.	By boat from Seabeck or Bangor.	Shellfish, crabs & salmonids.
HC-18		Big Beef Harbor (east of Seabeck) KIT0486 47°-39.351' N 122°-47.163' W	Exclusion - Keep oil out of harbor.	100'	Deploy boom across entrance to harbor at road crossing.	Stage from Seabeck or Scenic Beach State Park.	From the bridge at Seabeck Highway.	Sensitive nesting species; shorebird concentration; hatchery.
HC-19		Big Beef Harbor, backup KIT0486 47°-39.309' N 122°-47.052' W	Exclusion - Keep oil out of harbor.	400'	If strategy at bay entrance fails, move back behind bridge, will need a small boat or skiff.	Stage from Seabeck or Scenic Beach State Park.	From the bridge at Seabeck Highway.	Sensitive nesting species; shorebird concentration; hatchery.
HC-20		Seabeck Bay KIT0492 47°-38.405' N 122°-50.471' W	Exclusion/ Diversion/ Collection - Keep oil out of bay.	2000'	Anchor boom to shore just south of marina at rip-rap and run to opposite side of bay at an angle to collect at the road. A north wind is likely to push any oil from the north into Seabeck Bay.	Stage from Seabeck or Scenic Beach State Park.	By boat from the ramp at Miami Beach or at Seabeck; vehicle access from the Seabeck Highway.	Waterfowl concentrations and baitfish spawning.
HC-21		Stavis Bay KIT0507 47°-37.858' N 122°-52.083' W	Exclusion - Keep oil out of bay.	200'	Place boom across entrance to marsh area. Can be deployed from land, may need a jon boat at high tide.	Stage from Seabeck.	By boat from Miami Beach or Seabeck; vehicle access from private property.	Salmon and marsh habitat.

4.3.2.2 Proposed Booming and Collection Strategies: Matrices - HOOD CANAL

Strategy	Status	Location	Response Strategy	Length of Boom	Strategy Implementation	Staging Area	Site Access	Resources Protected
HC-22		Tarboo Bay (upper) JEF0161 47°-50.594' N 122°-48.773' W	Exclusion - Keep oil out of bay.	1500'	Deploy boom in chevron from Long spit to opposite shore. High tide strategy, area becomes a mud flat at low tide.	Stage from Quilcene Marina, Seabeck or Pleasant Harbor.	By shallow draft boat from Quilcene; potential vehicle access from Carl Johnson Rd.	Marine mammal haulouts, waterfowl and crab.
HC-23		Hamma Hamma Estuary MAS0637 47°-32.903' N 123°-2.609' W	Exclusion - Keep oil out of tidal marsh.	500'	Deploy boom across entrance to tidal marsh at bridge on highway 101. Can be depolyed from land, may need a jon boat.	Stage from the Hamma Hamma Oyster Co.	From Highway 101.	Waterfowl concentrations; sensitive nesting species.
HC-24		Hamma Hamma River MAS0637 47°-32.729' N 123°-2.533' W	Exclusion - Keep oil out of river.	300'	Deploy boom across river at bridge on highway 101. Can be deployed from land, may need a jon boat.	Stage from the Hamma Hamma Oyster Co.	From Highway 101 and dirt road on northeast side of bridge.	Waterfowl concentrations; sensitive nesting species, salmon.
HC-25		Jorsted Creek MAS0631 47°-31.560' N 123°-3.023' W	Exclusion - Keep oil out of creek mouth.	200'	Deploy boom at angle across creek mouth. Unlikely to enter creek mouth except on high spring tide. Can be deployed from land.	Stage from the Hamma Hamma Oyster Co.	From Highway 101. Private Property adjacent to creek.	Salmon.
HC-26		Eagle Creek MAS0620 47°-29.087' N 123°-4.676' W	Exclusion - Keep oil out of creek mouth.	100'	Deploy boom at angle across creek mouth. Unlikely to enter creek mouth except on high spring tide. Can be deployed from land.	Stage from the Hamma Hamma Oyster Co.	From Highway 101.	Salmon.
HC-27		Lilliwaup Creek Estuary MAS0611 47°-27.802' N 123°-6.836' W	Exclusion - Keep oil out of creek and estuary.	300'	Deploy boom at angle across river at bridge on Highway 101. Can be deployed from land, may need a jon boat.	Stage from the parking area near the bridge over Lilliwaup Creek.	From Highway 101.	Waterfowl and shorebird concentrations; salmon.

4.3.2.2 Proposed Booming and Collection Strategies: Matrices - HOOD CANAL								
Strategy	Status	Location	Response Strategy	Length of Boom	Strategy Implementation	Staging Area	Site Access	Resources Protected
HC-28		Small creek south of Lilliwaup Creek MAS0607 47°-27.447' N 123°-6.768' W	Exclusion - Keep oil out of creek.	100'	Deploy boom at angle across creek mouth. Unlikely to enter creek mouth except on high spring tide. Can be deployed from land.	Stage from the parking area near the bridge over Lilliwaup Creek.	From Highway 101.	Salmon.
HC-29		Dewatto Bay MAS0410 47°-27.237' N 123°-4.036' W	Exclusion - Keep oil out of inlet & river.	1500'	Deploy boom from Dewatto Pt. north to opposite shore.	Stage from the Hamma Hamma Oyster Co. or Hoodspport WDFW hatchery.	Vehicle access from the Dewatto - Holly Road on the south side of the bay; by boat from Hoodspport on the north side.	Protect eelgrass beds at mouth of bay; sensitive nesting species; shorebird concentrations; salmonids in river.
HC-30		Dewatto Bay MAS0413 47°-27.116' N 123°-3.731' W	Exclusion - Keep oil out of inlet & river.	800'	Backup for HC-29. Deploy boom from spit on north shore to closest point on opposite shore. May need a shallow draft boat, area becomes a mudflat at low tide.	Stage from the Hamma Hamma Oyster Co. or Hoodspport WDFW hatchery.	Vehicle access from the Dewatto - Holly Road on the south side of the bay; by boat from Hoodspport on the north side.	Protect eelgrass beds at mouth of bay; sensitive nesting species; shorebird concentrations; salmonids in river.
HC-31		Hoodspport MAS0593 47°-24.386' N 123°-8.313' W	Exclusion - Prevent oil from impacting WDFW hatchery.	100'	Boom off fish weir on S side of hatchery (high tide strategy). Can be deployed from land.	Stage from the WDFW hatchery.	By vehicle on the road to the hatchery.	WDFW hatchery.
HC-32		Enetai Creek MAS0580 47°-21.288' N 123°-9.556' W	Exclusion - Prevent oil from impacting Tribal hatchery.	100'	Deploy boom across creek south of Potlatch State Park. Can be deployed from land.	Stage from the Tribal hatchery or Potlatch State Park.	From Highway 101.	Tribal hatchery, salmon.

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Strategy	Status	Location	Response Strategy	Length of Boom	Strategy Implementation	Staging Area	Site Access	Resources Protected
HC-33		Tahuya River MAS0452 47°-22.242' N 123°-3.088' W	Exclusion - Keep oil out of river.	400'	Deploy boom across narrowest point of river mouth.	Stage from the Twanoh State Park.	By boat from the Potlatch State Park or Union; vehicle access from private property off the North Shore Road.	Salmonids and shellfish habitat; seabird, waterfowl, and shorebird concentration areas.
HC-34		Twanoh State Park MAS0534 47°-22.715' N 122°-58.472' W	Exclusion - Protect creek at State Park.	100'	Deploy boom across creek mouth at Twanoh State Park. Can be deployed from land.	Stage from the Twanoh State Park.	From Highway 106 to the Twanoh State Park.	State Park and salmon.
HC-35		Mission Creek MAS0489 47°-25.850' N 122°-52.370' W	Exclusion - Keep oil out of creek.	100'	Deploy boom across the mouth of the creek. Can be deployed from land.	Stage from the Belfair State Park.	Vehicle access from the Belfair State Park, off the North Shore Road.	State Park and salmon.
HC-36		Union River MAS0499 47°-26.755' N 122°-50.435' W	Exclusion - Prevent oil from moving into river.	200'	Deploy boom across river at first access point in river mouth. Necessary at high tide only, river flow at low tide will prevent oil from moving upstream. Can be deployed from land with a jon boat.	Stage from the Belfair or Twanoh State Park.	Vehicle access from the North Shore Road.	Waterfowl concentrations, sensitive nesting species, wetlands, salmon.